CLINICAL NOTES AND CASE REPORTS

A MEDIASTINAL TUMOR*

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HISTORY.—Case 36165: A boy of eight and one-half years had always been delicate. He suffered from eczema during infancy, and following bronchopneumonia at three years he was subject to attacks of asthma. He was sensitive to egg-white and fish. He had many colds, and at the age of five and one-half years again had bronchopneumonia. He was fairly well the following year until November, when his appetite failed; he lost weight and looked pale. He continued at school until December 12, when he was discovered to be running a slight fever and had become very irritable.

He entered the Children's Hospital, January 8, 1935.

Physical Examination.—He was small, poorly nourished and very pale, but did not look acutely sick. The eyes, ears, and nose appeared normal. A few shotty glands could be felt in the anterior triangles of the neck, the axillae, and the inguinal regions. The teeth contained a number of filled cavities. The gums were healthy. The tonsils were small and not injected. The left shoulder was held higher than the right. The veins of the left upper thorax were distended. Movement of the left chest was diminished. Tactile fremitus was absent over the upper part of the chest, anteriorly and posteriorly. There was dullness over the left upper chest anteriorly, from the supraclavicular space downward merging into cardiac dullness. The dullness extended laterally to the midaxillary line in the third interspace, from which it reflected anteriorly to the midclavicular line, leaving a small area of hyperresonance lateral to the cardiac apex in the fourth and fifth interspaces. To the right of the sternum the dullness extended 2½ to 3½ centimeters in the second and fourth interspaces, respectively. Posteriorly, the dullness occupied an area corresponding to that noted anteriorly, with an area of normal resonance in the axillary line. The breath sounds were tubular over the apex of the left lung. Strident, whistling breath sounds were heard below the clavicle.

The cardiac P. M. I. was in the midclavicular line in the fifth interspace. The cardiac borders were obscured by the dullness above described. The heart sounds were distant. A faint systolic murmur was heard at the base. The blood pressure was 102/60.

The abdominal wall was thin and relaxed. The liver dullness extended from the fifth interspace to 2½ centimeters below the costal margin in the nipple line, and was not tender. The spleen extended 5 centimeters below the costal margin. It was elongated, firm, and slightly tender.

The temperature was 99 degrees Fahrenheit; pulse, 88; respiration, 24. The urine showed nothing abnormal.

Blood: Hemoglobin, 54 per cent; red blood cells, 3.8 M; white blood cells, 32,700.

The differential count, done by Dr. H. G. Henderson on a fresh smear stained by the supravital method, showed: Polymorphonuclears, 5; lymphocytes, 90; myelocytes, 2; monocytes, 2; basophils, 1.

Most of the lymphocytes were immature and young forms. There was some variation in the size and shape of the red cells, and an occasional nucleated form.

Platelets, 190,000; coagulation time, five minutes; bleeding time, four minutes; tuberculin, negative; Wassermann, negative.

Diagnosis.—The elevated shoulder, diminished respiratory excursion, absent tactile fremitus and thoracic dullness suggest pleural effusion, but doubt as to the correctness of this diagnosis is indicated by the normal position of the cardiac apex and by the unusual distribution of the dullness even for an encapsulated or interlobar collection of fluid. The peculiar whistling breath sounds suggest compression of a bronchus. The dilated veins over the left chest indicate pressure against the superior vena cava or its branches. A mediastinal tumor would best explain all these findings. This diagnosis was confirmed by the x-ray, in which a large tumor mass was seen to occupy the anterior mediastinum mainly on the left, obscuring the lung field except for a narrow lateral portion.

Of the mediastinal tumors likely to be encountered in childhood, lymphocytoma, lymphosarcoma, dermoid cyst or teratoma, there is strong evidence in favor of lymphocytoma or leukemic infiltration in the enlargement of the spleen and the blood picture. The blood picture shows a large number of immature lymphocytes, which makes the diagnosis of acute lymphatic leukemia likely. That the disease is in the early stage is indicated by the lack of evidence of infiltration of other organs or lymph glands, the normal coagulation and bleeding time, and the relatively good general condition of the patient.

Progress and Treatment.—The temperature ranged between 98 and 101 degrees Fahrenheit for three weeks to January 31, after which it swung to 104 degrees Fahrenheit.

X-ray treatment to the chest was begun January 12 and repeated at five-day intervals. The doses were small (48 to 65 R.). On the day of the second treatment, the tumor mass was slightly smaller to percussion, and according to tracings made with the aid of the fluoroscope. After the fourth treatment the mass was definitely smaller. The blood picture was much the same, except that the lymphocytes had increased to 99 per cent, with many immature forms.

By January 30 the liver and spleen both extended to the level of the umbilicus. The cervical glands were considerably enlarged. The patient was drowsy and he had a profuse nosebleed. The white count was 57,400, the hemoglobin 50 per cent. From this time on there was a succession of severe hemorrhages from the nose, into the right auditory canal and temporal region.

On February 9, petechial hemorrhages appeared over the entire body; the white count was 73,000 with 98 per cent lymphocytes. Two days later it dropped to 3,700, with 100 per cent lymphocytes; and on the day of death, February 14, the white count was 300, hemoglobin 17 per cent.

Every type of supportive treatment, including transfusions, hematinics and hemostatics, were used without affecting in any way the rapid progress of the disease. There is no doubt that the x-ray therapy did decrease the size of the mediastinal tumor, but certainly did not delay the outcome of this invariably fatal disease.

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PEPTIC ULCER*

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HERE is an old, old story; only it happened this year! And it involves a number of the staff of this hospital and a patient who was a "stomach complainer."

The latter was a 46-year-old salesman, who had had more than his share of family and financial troubles prior to a consultation in March, 1935. In late 1934 he had suffered an acute pain in the upper belly, which necessitated opiates and bed rest for several weeks—quite likely an "acute abdomen." Later, an ex-ray study of the stomach found for "ulcer of the stomach." The medical consultant's findings in March were: "A dyspeptic individual who was afraid of dentist, doctors, and life itself; the usual history of 'alcoholism'; a marked tremor; pulse fast; insomnia; periods of

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